Payment Processing Overview Document

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Chapter 1: Learning About Payment Processing

The georgia.gov Payment Processing Service consists of several different software and hardware components put together to deliver payment processing functionality for GTA clients. This document has been put together to serve as an overview document for the georgia.gov Payment Processing Service and to assist clients with navigating the complexities involved with electronic payment processing.

The electronic payment process consists of the capture of payment information, the transmission of that information to a payment processor, and the execution of the funds transfer to the appropriate government account or accounts by the payment processor.

This chapter provides an overview of the electronic payment process, as well as an introduction to key concepts about the process.

Key Concepts & Definitions

The following concepts are important for understanding how the payment process works:

- Credit Card
- Issuing Bank
- Agency Bank
- Merchant Account
- Payment Processor
- Payment Authorization
- Payment Settlement
- Agency Application
- Payment Engine

Credit Card

A credit card is a plastic card issued to an individual or business which is accepted by participating merchants to pay for goods or services. The entity issuing the card to the cardholder reimburses merchants accepting their cards, and charges the cardholding customer's account for the amount of the transaction. For purposes of this document, the term "credit card" includes Visa, MasterCard, American Express and Discover branded cards.

Visa and MasterCard cards are sometimes referred to as bank cards since they are issued by financial intuitions ("issuing banks") which are members of the Visa and/or MasterCard associations. These associations, which are each made up of over 20,000 member banks, are responsible for:

- o Developing rules and regulations governing their cards.
- o Routing transactions between financial processors (e.g., FDMS) and member issuing banks, and promoting and supporting their brands and developing new products.

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Visa and MasterCard credit cards are issued to cardholders by the issuing banks, which set fees, establish credit limits and bill cardholders for charges.

American Express and Discover are proprietary entities performing the functions of both a card association and an issuing bank.

Issuing Bank

A financial institution that issues credit cards, debit cards, electronic checks, or payments from savings accounts to an end user. During the payment authorization process, the issuing bank verifies that the payment information provided by the end user is valid and that a sufficient line of credit exists.

Agency Bank

A financial institution that has entered into an agreement with an agency to process payment transactions (e.g. Wachovia, Sun Trust).

Merchant Account

A merchant account is a relationship between an agency and merchant bank that allows the agency to accept credit cards, debit cards, electronic checks or payments from savings accounts. Before processing payments, each agency must have a merchant account agreement with the official State of Georgia Processor, First Data Merchant Services (FDMS).

Payment Processor

A payment processor processes credit cards, debit cards, electronic checks or payments from savings accounts for an agency's application and deposits funds into the agency's bank account. The State of Georgia Office of Treasury and Fiscal Services (OTFS) currently manages the relationship and the contract with the State of Georgia Payment Processor.

Agency Application

An agency application is an electronic application that initiates an electronic credit card transaction and connects to the georgia.gov Payment Engine through the internet or a network. Agency applications can be hosted in the georgia.gov portal environment or anywhere that an agency chooses.

Payment Engine

A payment engine is a combination hardware / software solution that is responsible for routing electronic transactions to a payment processor.

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Electronic Payment Process Overview

Electronic payment processing traditionally consists of two main steps:

1. Payment Authorization
2. Payment Settlement

The following section defines and explains the processes that are involved with these two steps.

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Payment Authorization

Authorization is the process by which card issuers either approve or deny requests to accept transactions. Approval is based on a validation of the account number and expiration date to verify that a cardholder's account is open, address information, and that the transaction will not place the account above any credit limit. If an authorization is successful, a hold for the transaction amount will be placed on the end user's credit card.

Authorization will be performed on-line and completed in a matter of seconds. Each transaction is authorized separately as it occurs, and the authorization status is returned immediately after the transaction is submitted for approval. If an authorization is declined, the cardholder will immediately be made aware that their transaction was not completed with the card used for payment. If a transaction is successful, a confirmation number will be returned.

The Authorization process consists of the following steps:

1. **User submission of payment:** A user accesses an agency application, provides the required payment information, and then submits the payment. The electronic payment solution performs initial validation of the information entered to ensure that it is complete and accurate.

2. **Payment Authorization:** The submitted payment information – card account number for credit and debit cards is authorized via a payment processor.

   For credit/debit card, the electronic payment solution:
   - Validates the card number.
   - Validates the billing address (Only if AVS option turned on). The Address Verification Service (AVS) request is routed from the payment engine through the payment processor directly to the specific issuing bank. The address information provided by the application end user is compared to the cardholder billing address on file with the issuing bank. The result of the AVS comparison is included in the authorization response returned to the Payment Engine. If the AVS check fails, users will be prompted to re-enter address information. If this situation continues, the system will decline the authorization.
   - Indicates to the payment processor to put a hold on funds for the amount of the authorization. If the end user does not have sufficient credit to cover the cost of the transaction, the system will decline the authorization.

3. **Return response:** Once the payment processor has processed the authorization request a response will be returned to the Payment Engine. The Payment Engine will in turn send a response back to the agency application with the result of the authorization attempt.

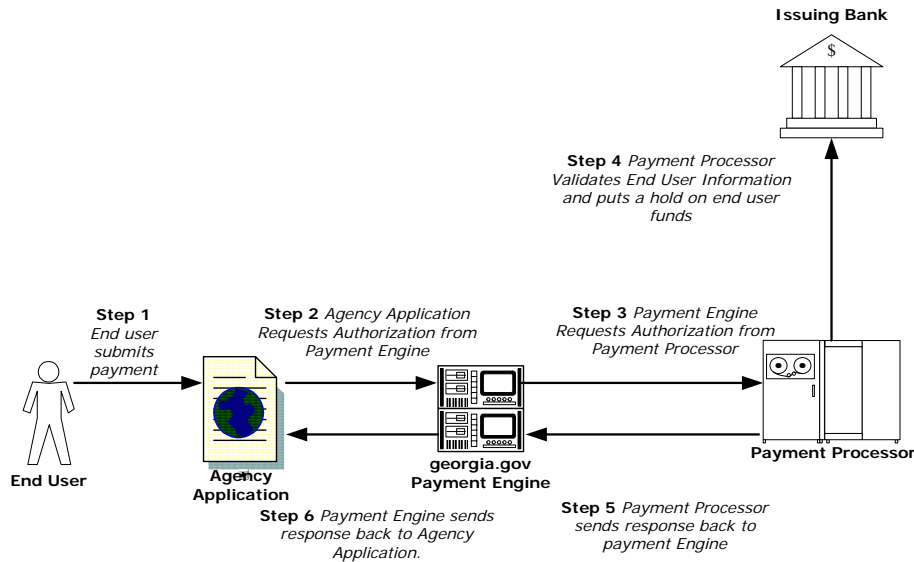Payment Authorization is demonstrated in the diagram below:

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Step 4 *Payment Processor Validates End User Information and puts a hold on end user funds*

Issuing Bank

Step 1 *End user submits payment*

Step 2 *Agency Application Requests Authorization from Payment Engine*

Step 3 *Payment Engine Requests Authorization from Payment Processor*

End User

Agency Application

georgia.gov Payment Engine

Payment Processor

Step 6 *Payment Engine sends response back to Agency Application.*

Step 5 *Payment Processor sends response back to payment Engine*

Figure 1-1: Payment Authorization

Payment Settlement

Credit card settlement is the process by which authorized transactions are submitted to card issuers for payment. Unlike authorization, which is typically performed in real time, settlement is a batch process. Prior to settlement, payment information for authorized transactions is "captured" to create a settlement record for each authorized transaction.

1. **Payment settlement:** All transactions accumulated during the day are batched and sent to the payment processor for fulfillment. The payment processor responds with a settlement confirmation and then issues an Automated Clearing House (ACH) credit to the agency bank account.
2. **Electronic transfer of funds to agency:** All funds collected are delivered electronically to the agency bank account (typically through an Automated Clearing House [ACH] transaction).
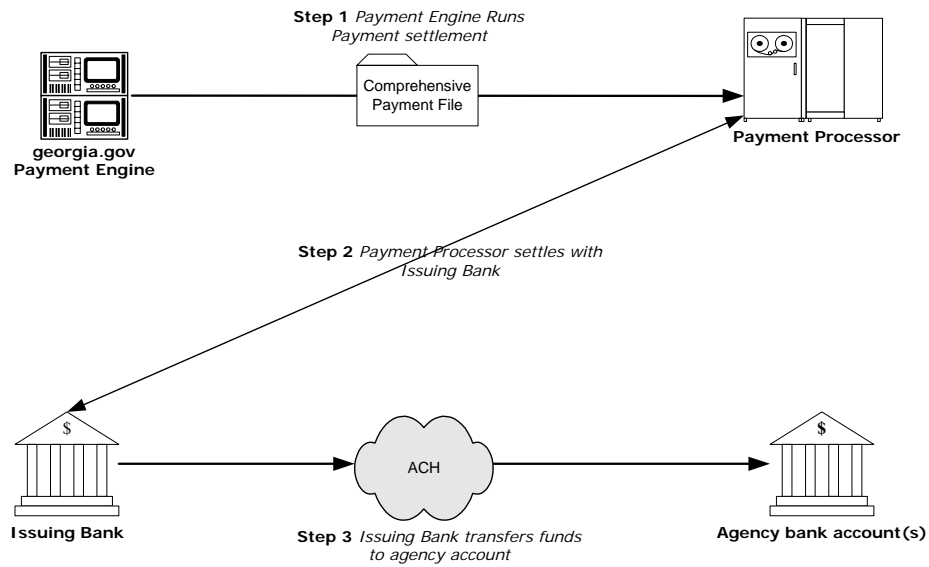
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Step 1 *Payment Engine Runs Payment settlement*

Comprehensive Payment File

georgia.gov Payment Engine

Payment Processor

Step 2 *Payment Processor settles with Issuing Bank*

Issuing Bank

ACH

Step 3 *Issuing Bank transfers funds to agency account*

Agency bank account(s)

Figure 1-2: Payment Settlement

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Chapter 2: Understanding Features of the georgia.gov Payment Processing Service

The following chapter highlights the features of the georgia.gov Payment Processing Service and the individual components that comprise the service.

Payment Service Features

The georgia.gov Payment Processing Service is primarily made up of three tightly integrated components:

- Georgia.gov Payment Engine
- Georgia.gov Payment Processing Administration Tool (PPAT)
- Georgia.gov Payment Processing Controller Component (PPCC)

Each component has a specific purpose in payment processing services to clients.

Georgia.gov Payment Engine

A payment engine is a combination hardware / software solution that is responsible for routing electronic transactions to a payment processor. The georgia.gov Payment Engine currently supports the following payment processing features:

- Automatic payment settlement/deposit
- Deferred payment settlement/deposit
- Void payments
- Refund payments
- Negate payments
- Payment audit trail with unique confirmation numbers
- Track payments
- Activity and Deposit Reporting
- Address Verification Service (AVS)
- Card Verification Value (CVV2) – Security Indicator Validation

Automatic Payment Settlement

The georgia.gov Payment Engine provides automated processes for settling previously authorized payments. Payment settlements occur in a batch mode and all settlement approvals and declines are stored in the Payment Engine's database for auditing and tracking purposes. Settled payments are batched and deposited into the destination bank accounts via standard ACH.

Deferred Payment Settlement

The georgia.gov Payment Engine provides agencies with the ability to specify when a transaction should settle. An agency can allow an end user, or an individual within the agency,

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to specify the date to settle. This feature is advantageous to agencies that do not want to charge end users until services have been rendered or goods have been shipped. Payments that have deferred settlement dates are authorized immediately and a confirmation number is returned to the end user. Once the settlement date is reached, the transaction is automatically picked up in the next settlement batch for processing. If the settlement date exceeds the expiration date for the authorization, the payment may need to be reauthorized before it can be settled. Once reauthorized, the payment is then picked up for settlement.

Void Payments

The georgia.gov Payment Engine allows client applications to void previously authorized payments that have not settled. The Payment Engine will ensure that a successfully voided payment will never settle. This feature eliminates the need to issue a refund transaction every time an invalid payment was received. A void will not show up on the end user's credit card statement, however a hold for the transaction amount will remain on the cardholders account. The issuing bank will then release the hold on the funds based upon their schedule. All information about the voided payment is stored in the Payment Engine's database for auditing and tracking purposes. Clients can also void transactions manually via the georgia.gov Payment Processing Administration Tool (PPAT). More detail can be found on the PPAT in Payment Processing Administration Tool User Manual.

Refund Payments

The georgia.gov Payment Engine allows client applications to issue refunds on previously authorized or settled payments. Payment refunds occur in a batch mode and all information about the refund is stored in the Payment Engine's database for auditing and tracking purposes. Refunds are batched and deposited into destination bank accounts via ACH. Clients can also refund transactions manually via the georgia.gov Payment Processing Administration Tool (PPAT). A refund will show up on the end user's credit card statement. More detail can be found on the PPAT in Payment Processing Administration Tool User Manual.

Negate Payments

Through the negate feature of the georgia.gov Payment Engine, a payment is voided or refunded based on the settlement status of the payment. Payment Engine recognizes the status of a payment and performs the appropriate void or refund transaction based on this status. Clients can also manually negate transactions via the georgia.gov Payment Processing Administration Tool (PPAT). More detail can be found on the PPAT in Payment Processing Administration Tool User Manual.

Partial Refund of Payments

The georgia.gov Payment Engine allows client applications to issue a partial refund on previously authorized or settled payments. A traditional refund would refund the total amount authorized for the transaction while a partial refund would only refund a specified subset. Multiple partial refunds can be processed against an authorized payment, however the Payment Engine will ensure that the refunds do not total more than the original transaction amount.   Partial refunds occur in a batch mode and all information about the partial refund is stored in the Payment Engine's database for auditing and tracking purposes. Refunds are batched and deposited into destination bank accounts via ACH. Clients can also manually run partial refund of transactions via the georgia.gov Payment Processing Administration Tool (PPAT). More detail can be found on the PPAT in Payment Processing Administration Tool User Manual.

Payment Audit Trail with Unique Confirmation Numbers

The Payment Engine saves all information associated with every event that can occur in a

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payment's life cycle. This auditing information includes dates/times and success/failure codes for all interactions with the back-end payment processor, including approval/decline reason codes and Address Verification Service (AVS) response codes. All information is recorded in the Payment Engine's database and may be used to reconstruct the life cycle of any payment. This can be helpful in troubleshooting problems with a payment, identifying failures with the back-end payment processor, and performing finance and accounting processes.

Track Payments

The georgia.gov Payment Engine provides client applications the ability to track any payment. If payment-tracking functionality has been implemented in the application, the payment tracking feature allows government agencies to provide real-time payment status to their end users. Both end users and customer service representatives can track the status of any payment on a client application on demand. Tracking information presented includes the payer's information, payment information, and history of the payment. This payment history includes a timestamp and reasons for approval/decline for every event in a payment life cycle.

Client applications can track individual payments with a unique payment confirmation number that is issued at the time the payment is authorized.

Reporting

The georgia.gov Payment Processing service provides the ability for clients to obtain detailed reports to assist them in tracking application usage as well as for reconciliation of their accounts receivable data. Reports are accessed via the georgia.gov Payment Processing Administration Tool (PPAT). More information on reporting and the PPAT can be found in the Payment Processing Administration Tool User Manual.

Invoice ID

The georgia.gov Payment Processing service allows a client application to send over a specific Invoice ID or a unique identifier to create relational integrity between the georgia.gov payment engine and an agency application.

Address Verification Service (AVS)

Address Verification Service (AVS) is a fraud prevention service that validates a cardholder's address (provided during a transaction) against the card issuer's records. This service is provided as part of a credit card authorization for electronic payment transactions. A code is returned with the authorization result that indicates the level of accuracy of the address match and helps secure the most favorable interchange rates. Currently only zip code validation is supported by the georgia.gov Payment Engine. The default setting for the georgia.gov Payment Processing Service has AVS turned on for all accounts unless otherwise specified by the client. Please note that if AVS is turned on and a transaction fails because of invalid Address information, a hold for the transaction amount will remain on the cardholders account until the bank releases the funds.

Card Verification Value (CVV2) – Security Indicator Validation

CVV2 is a security measure we require for all transactions. Since a CVV2 number is listed on your credit card, but is not stored anywhere, the only way to know the correct CVV2 number for your credit card is to physically have possession of the card itself. All VISA, MasterCard and American Express cards made in America in the past 5 years or so have a CVV2 number. Discover has recently introduced CVV2, however they may refer to the Card Verification Value as a "CardMember ID". Please refer to Appendix A for more information on Card Verification Values and how to find them. Please note that if CVV2 is turned on and a transaction fails because of an invalid Security Indicator, a hold for the transaction amount will remain on the cardholders account until the bank releases the funds.

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Georgia.gov Payment Processing Administration Tool (PPAT)

The georgia.gov Payment Processing Administration Tool (PPAT) was developed to serve as the single consolidated website to handle all administrative functions associated with the georgia.gov Payment Processing Service. With the proper credentials (User ID & Password), a user can log into the Payment Processing Administration Tool and manage the transactions related to their application. The following list is a high level overview of the functionality available in the PPAT.

- Reporting – The PPAT provides an interface that will allow clients to run an Activity Report and a Deposit Report.

    - o Activity Reports allow clients to search for all account activity for a specific day or within a specified date range. Reports show all authorization as well as settlement activity.
    - o Deposit Reports allow clients to pull up a report for a specific day to view estimated deposits of settled funds into their bank account.

- Refund Payment, Void Payment, and Negate Payment – The PPAT allows clients to manually process a refund, partial refund, void, or negation of a transaction.

- Manual Authorization – The PPAT provides an interface to manually authorize a transaction by typing in the cardholder's information.

- Search – The PPAT provides an interface to search for transactions by multiple criteria methods. A client can search for transactions via a:

    - o Confirmation Number
    - o User's Name
    - o Last four digits of the card holder's credit card number

    If the search criteria meets more than one transaction, the result set will be returned.

- Manual Settlement of Transactions – The PPAT provides an interface to manually input a settlement date for a transaction that was designated for deferred settlement.

For more information on the PPAT, please reference the georgia.gov Payment Processing Administration Tool User Manual.

Georgia.gov Payment Processing Controller Component (PPCC)

The georgia.gov Payment Processing Controller Component (PPCC) is the interface that allows clients of the georgia.gov Payment Processing Service to connect to the georgia.gov Payment Engine. The PPCC is a custom interface built specifically for the georgia.gov Payment Processing Service. The traditional approach for payment processing connectivity usually has an application connecting directly to a payment engine.
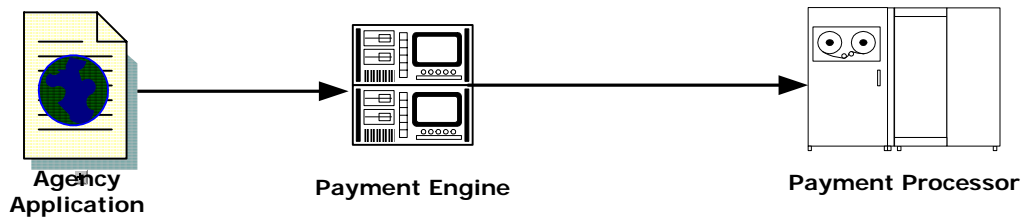
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Figure 2-1: Traditional Payment Processing Model

Although the traditional model is functionally sound, the georgia.gov Payment Processing Service identified one major flaw with the traditional approach. If the payment engine were to change, every client of the Payment Processing Service would need to modify their applications to connect to a different payment engine. This potentially would require a customer to spend significant time rewriting and testing their applications for use with the new payment engine. The addition of the PPCC to the georgia.gov Payment Processing environment mitigates this problem by providing a level of abstraction between an application and the georgia.gov Payment Engine. All customers of the georgia.gov Payment Processing Service will connect their applications to the PPCC rather than the georgia.gov Payment Engine directly. In the event that a new payment engine were introduced to the georgia.gov Payment Processing environment, the PPCC would be enhanced to connect to the new payment engine, thus making the change transparent to the customers.
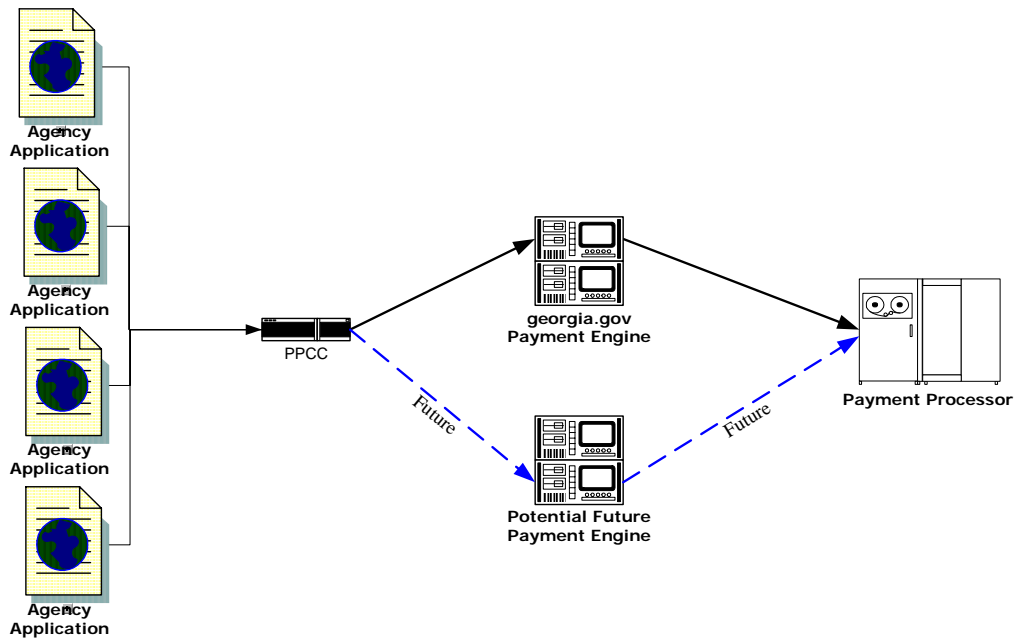

Figure 2-2: georgia.gov Payment Processing Model

For more detailed technical information on the PPCC, please reference the georgia.gov Portal Developers Kit. (http://www.ganet.org/pdk)

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Chapter 3: Reconciliation

Credit Card Reconciliation Introduction

The reconciliation function is an agency's integral back-office activity to verify that funds for all authorized Visa, MasterCard, American Express and Discover transactions submitted to the state's payment processor (currently First Data Merchant Services) are received in the agency's designated bank account at the end of the settlement process. The reconciliation function will also serve as a basis for verifying the accuracy of First Data Merchant Service's (FDMS), American Express' and Discover's monthly invoices for services and transaction fees.

Reconciling Settled Transactions with Settled Funds

Reconciliation should be performed by agencies to verify that they have received funds for all authorized transactions submitted for settlement. Since FDMS will initiate transferring of Visa and MasterCard funds into an agency's designated account, American Express will initiate transferring of funds for American Express transactions and Discover will initiate transferring of funds for Discover transactions, separate reconciliations will need to be performed for Visa/MasterCard, American Express and Discover activity. While there are several points in the settlement process which could be used to reconcile receipt of funds, the following guidelines provide a recommended approach.

To understand reconciliation you have to understand each point in the reconciliation process. The following diagram shows each point of reconciliation:
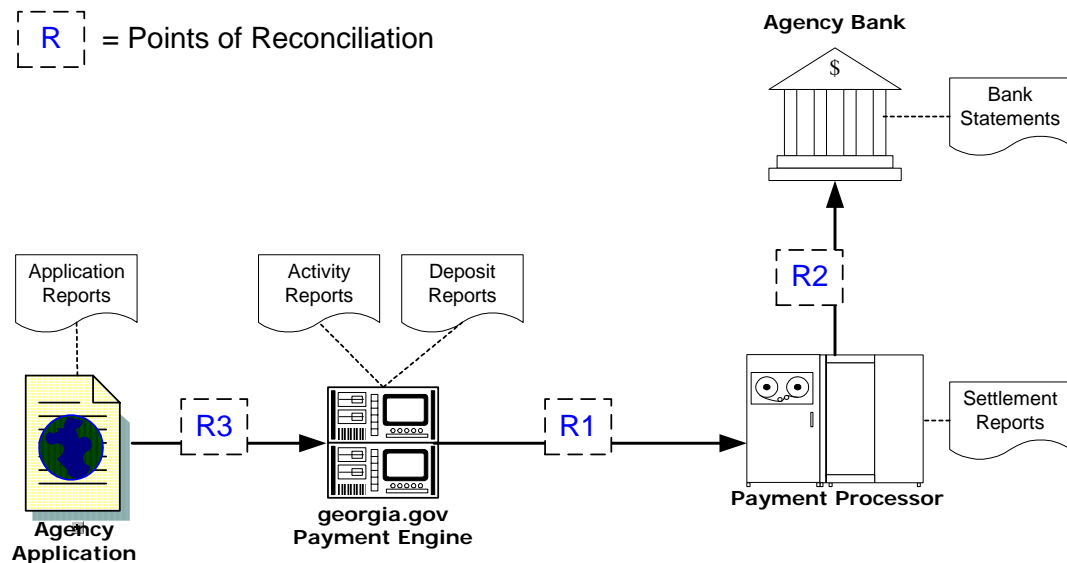

Figure 3-1: Points of Reconciliation

Recommended Reconciliation Process:

During payment processing the following data is collected:

1. Detailed data (i.e., transaction level data) is passed from the georgia.gov Payment Engine to First Data Merchant Services (FDMS) for each transaction that takes place. Activity Reports are available to review all transactions that took place on a given calendar day (12:00am – 11:59pm). Activity Reports contain transaction totals and the dollar value of those transactions. The Activity Reports will be the basis for performing the reconciliation function since they provide the dollar totals which are ultimately expected to be deposited into the agency's designated account. Note: The dollar totals will be the gross amount of activity and will **not** be net of discount fees associated with the credit card transactions

2. Settlement runs each evening between the georgia.gov Payment Engine and FDMS. FDMS is then responsible for processing the settled transactions with the issuing bank of the credit card used and depositing funds into the agency bank account. Via the FDMS My Merchant View website (www.mymerchantview.net) clients can obtain various reports. By using the reporting feature on the My Merchant View website, a client can lookup transactions to validate the total dollar amount sent to FDMS for settlement as well as the total dollar amount sent to the bank for deposit. If everything was processed correctly, the totals from the Activity Report and the FDMS My Merchant View Reports should have the same total.

3. If the dollar amounts on the Settlement Report and the Activity Report total correctly, then the final step in reconciliation is to validate that the appropriate funds are deposited in the Agency bank account. Once the client receives a statement from the bank (online or paper), the client need to validate the total dollar amount for the credit card transactions against the total dollar amount from the Activity and FDMS My Merchant View Reports.

Summary:

┌ ─ ─ ┐
│ R1 │
└ ─ ─ ┘ Reconciliation Step 1. Agencies should compare the total dollars from the Activity Report produced by the georgia.gov Payment Engine with the total dollars FDMS has initiated for transfer to the agency's account for that batch. Agencies have visibility into the amounts FDMS has initiated for payment through the FDMS My Merchant View website.

┌ ─ ─ ┐
│ R2 │
└ ─ ─ ┘ Reconciliation Step 2. Agencies should compare the total dollars from the payment engine's Activity Report with the total dollars deposited into their designated depository account for each day's activity. Agencies have visibility into the amounts deposited into their designated account through their bank statements. NOTE: the exact date on which the funds will be deposited may vary slightly from bank to bank.

┌ ─ ─ ┐
│ R3 │
└ ─ ─ ┘ Reconciliation Step 3 (Optional) Depending upon how an agency builds their applications, they may have the ability to compare the total dollar amount of the transactions for the application against the other reports outlined in Reconciliation Steps 1 and 2. By validating the dollar amounts between the application and the Payment Engine's Activity Report the client can validate that every transaction was transferred to the georgia.gov Payment Engine correctly.
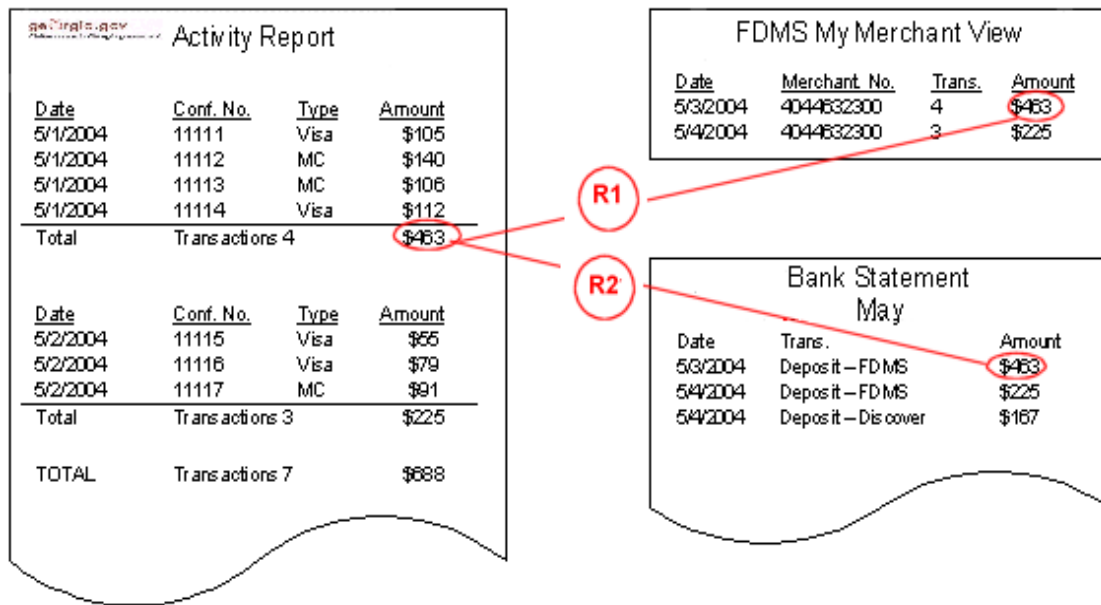
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Figure 3-2: Example of Reconciliation

What to do if there is a problem with Reconciliation:

If there were a discrepancy between the funds deposited into the designated account and the amount that was anticipated, the agency should attempt to identify the discrepancy using the inquiry points identified above in Figure 3-1. The Diagram illustrates each point of data transfer and by reviewing the reports for each Reconciliation Point (R1 – R3) the client can determine where the potential problem occurred. Once the point of failure has been identified, here is how the client can obtain assistance:

1. Discrepancy between Agency Application & georgia.gov Payment Engine – Contact the georgia.gov Payment Processing Team by following the support model given to your agency.

2. Discrepancy between the georgia.gov Payment Engine and the Processor (FDMS) – Contact the georgia.gov Payment Processing Team by following the support model given to your agency.

3. Discrepancy between the Processor (FDMS) and the agency bank statement – If funds sent for deposit to the agency bank account are not showing up on the bank statement, contact your representative at the bank.

Tips:

- The georgia.gov Payment Processing Service offers deposit reports which display an **estimated** deposit date in an agency's bank account. These reports calculate the estimated deposit date by adding (x) days from the time of settlement. Currently based upon experience with various banks, it takes approximately 2 days for settlements to show in a client's bank account. Therefore the value of (x) is currently set to 2.

- When reconciling, if the total amounts are slightly different between the two

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reports, there is the potential that the server clocks between the different systems involved in payment processing are not perfectly synched. An example of this would be if a user submits a transaction at 11:59 on a Monday the transaction would show up on the Monday Activity Report, but there is potential that it also might show up on the Tuesday Report from FDMS. Unfortunately, since agency servers, FDMS servers, and bank systems are outside the control of the georgia.gov Payment Processing Service there will always be the potential for this to happen.

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Chapter 4: Georgia.gov Payment Processing Support Model

Payment Processing Service Support

Clients of the georgia.gov Payment Processing Service are provided with email support, and basic telephone support on a 24x7 365 days a year basis. The following guidelines and process apply to support of the service.

1. **Telephone, Web-Based and Email Support:** GTA agrees to provide its Payment Processing Service clients email support, via e-mailing consolidatedhelpdesk@GTA.ga.gov,; and basic telephone support at 404-656-7378.

2. **Support Response:** GTA will use reasonable efforts to respond to all support calls and emails as quickly as practicable.

3. **Resolution:** GTA shall use reasonable efforts to resolve services interruptions which are within the control of the georgia.gov Payment Processing Service.

4. **Scheduled Maintenance Notification:** GTA plans several scheduled maintenance windows each year, whenever possible on early Sunday mornings (e.g., 3 a.m. - 6 a.m. Eastern Standard Time) in order to maintain and increase the availability and performance of the Payment Processing Service. GTA will attempt to schedule Maintenance Windows around customer's peak usage times if possible.

5. **Primary Client Contact:** In order to obtain the support set forth above, the client shall designate and provide to GTA, a representative ("Primary Contact"), along with a contact phone number and email address, who shall act as the client's support liaison. The Primary Contact is the contact provided on the Customer Information Form at the time of account setup. If the Primary contact is not available, the client may designate alternate representatives until such time as the Primary Contact is again available provided it notifies GTA of the names, phone numbers, and email addresses of the alternate primary contacts. The Primary contact will be used to validate a client trying to talk with GTA's support team. In addition, the contact information will be used to send service updates as well as any necessary outage notifications. The client is responsible for providing GTA with the most current contact information of its Primary Contacts in order to obtain the GTA technical support.
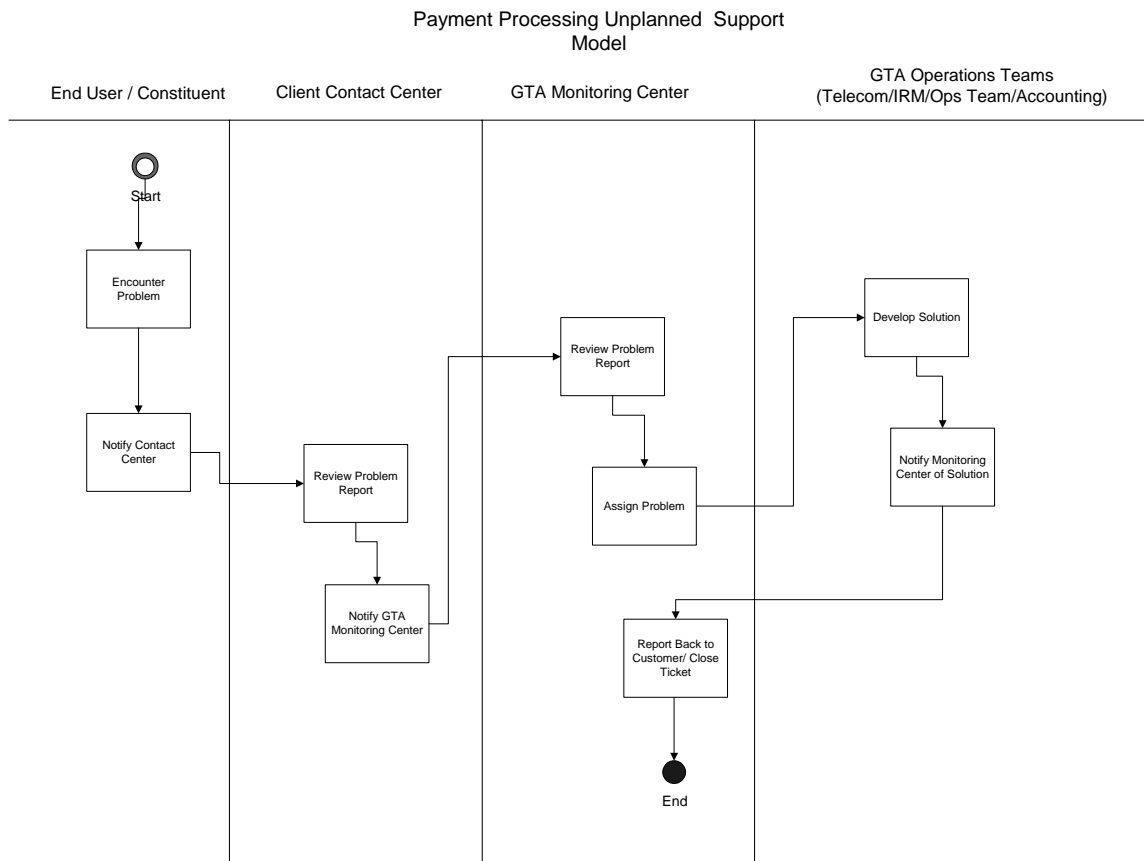
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GTA Payment Processing Support Process:

Telephone: 404-656-7378

Email: consolidatedhelpdesk@gta.ga.gov
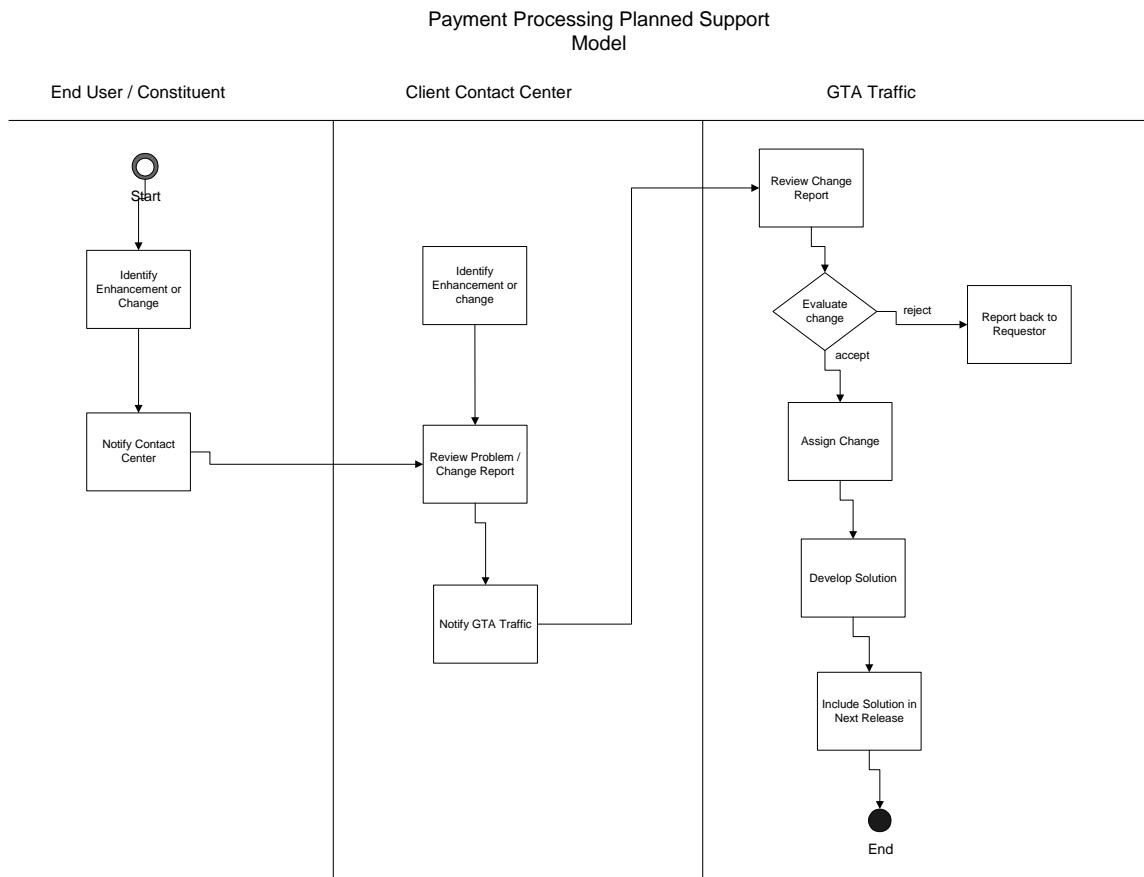

Unplanned Support Model:

The unplanned support model should be followed for any emergencies, outages, or problems the client is experiencing with the georgia.gov Payment Processing Service. In the model, if an end user of a client application using the georgia.gov Payment Processing Service experiences a problem they would first notify the Client Contact Center. The Client Contact Center would then be responsible for determining if the problem with the client application is within the application or with the georgia.gov Payment Processing Service. If the Client Contact Center determines the problem is with the Payment Processing Service the client contact center primary contact will contact the GTA Monitoring Center. The GTA Monitoring Center is staffed 24 hours a day, 365 days a year. Once the problem has been escalated to the GTA Monitoring Center, a GTA internal ticket will be created and assigned to the appropriate resources responsible to resolve the escalated problem.

Payment Processing Unplanned Support Model

End User / Constituent	Client Contact Center	GTA Monitoring Center	GTA Operations Teams (Telecom/IRM/Ops Team/Accounting)

Start

Encounter Problem

Notify Contact Center

Review Problem Report

Notify GTA Monitoring Center

Review Problem Report

Assign Problem

Develop Solution

Notify Monitoring Center of Solution

Report Back to Customer/ Close Ticket

End

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Planned Support Model:

Email: traffic@gta.ga.gov

The Planned support model should be followed when a client requests enhancements, new functionality, or changes to the georgia.gov Payment Processing Service. The Planned Model is used for these types of changes because the work associated with the change will be setup as a project and assigned a GTA Project Manager. Using this model, if a client identifies any changes or enhancements they would like to request for the georgia.gov Payment Processing Service, they would be responsible for reviewing and internally prioritizing the requested changes internally before contacting GTA. Once a client determines they want to propose the change the client primary contact will send an email to the GTA traffic mailbox (traffic@gta.ga.gov). GTA will evaluate the request and if accepted, the GTA Traffic Group will then be responsible for initiating a project and determining the correct resources to address the change request. If not accepted, the GTA Traffic Group will report back to requestor

Payment Processing Planned Support
Model

End User / Constituent	Client Contact Center	GTA Traffic

Start

Identify Enhancement or Change

Notify Contact Center

Identify Enhancement or change

Review Problem / Change Report

Notify GTA Traffic

Review Change Report

Evaluate change — reject → Report back to Requestor

accept

Assign Change

Develop Solution

Include Solution in Next Release

End

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Chapter 5: Georgia.gov Payment Processing High Level Architecture

The following figure illustrates the high level architecture of the georgia.gov Payment Processing Solution. The following diagram and text is not meant to be a technical overview, but to provide a high level view of the georgia.gov Payment Processing Service and its architecture. For more information on the design and architecture of the georgia.gov Payment Processing Service, please contact the georgia.gov Payment Processing Team for more information.
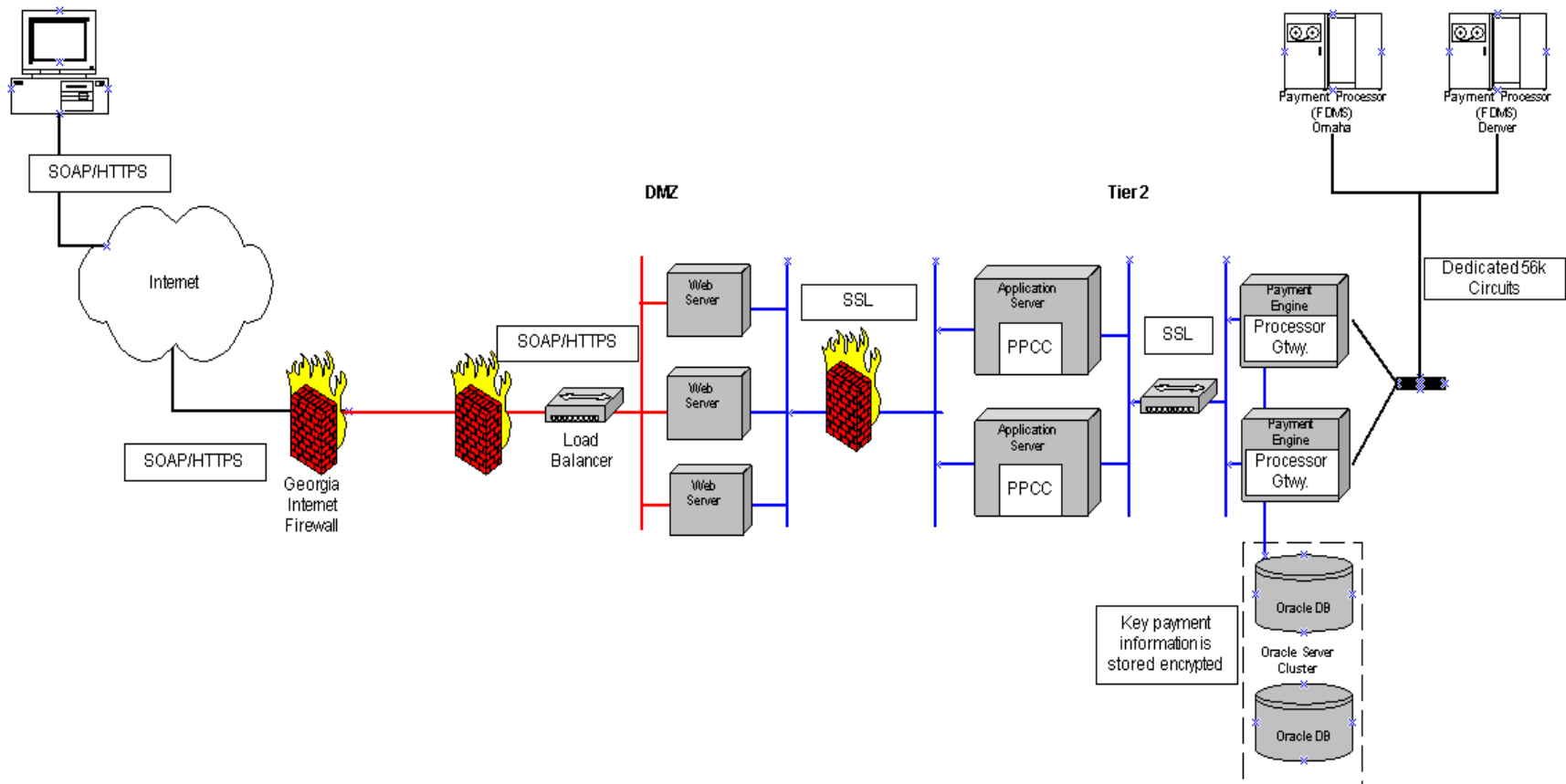
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Figure 4-1: Payment Processing High Level Architecture

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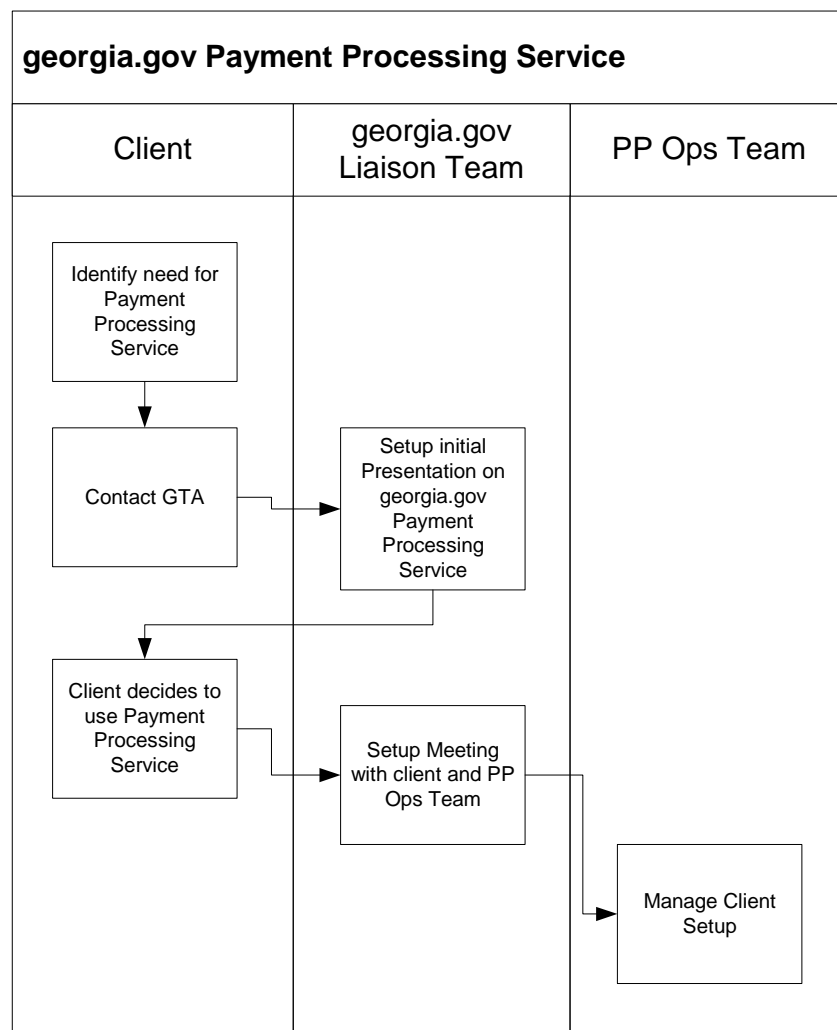
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Chapter 6: Connecting to the georgia.gov Payment Processing Service

The following Chapter will detail how to:

- Sign up for the georgia.gov Payment Processing Service
- Contact GTA

Sign up for the georgia.gov Payment Processing Service

Traditionally when a client is interested in using the georgia.gov Payment Processing Service, the georgia.gov Portal Liaison team will setup a meeting with the client to explain the service and to answer questions the client may have. Once the client has decided to move forward with the georgia.gov Payment Processing Service, the Portal Liaison representative will be responsible for setting up a meeting between the client and the georgia.gov Payment Processing Team. Once this meeting takes place the Payment Processing Team and the client team will work directly with each other. During the process of working together the Payment Processing Team and the client will agree on a schedule and milestone dates for going live.

georgia.gov Payment Processing Service		
Client	georgia.gov Liaison Team	PP Ops Team

Identify need for Payment Processing Service

→ Contact GTA

Setup initial Presentation on georgia.gov Payment Processing Service

Client decides to use Payment Processing Service

Setup Meeting with client and PP Ops Team

Manage Client Setup

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Contact GTA

If you or your organization is interested in using the georgia.gov Payment Processing Service, please contact the georgia.gov Portal Liaison Team or your Agency Account Manager. You can contact the portal liaison team at joining@gta.ga.gov.

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Appendix A – Card Verification Value (CVV2)

About CVV2 Codes

A CVV2 (Card Verification Value 2) code is a security feature of a credit card. It is an extra 3 or 4 digit number printed, but not raised, on the card. By verifying the CVV2 code on a card, the payment processing service can be sure the person trying to complete a transaction has the card in front of them. This along with the Address Verification Service (AVS) can be used to prevent fraud. Additionally, the georgia.gov Payment Processing Service requires a secure connection that encrypts your card information before it is transmitted to us over the Internet.

How to find your CVV2 number:

Visa, MasterCard & Discover:
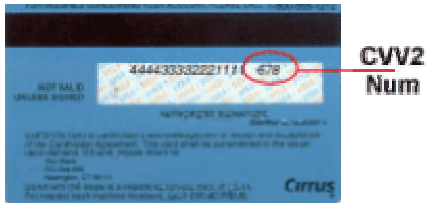
The CVV2 code is the 3 digits printed on Visa, MasterCard, and Discover cards in the signature panel on the back of the card. It is the last 3 digits AFTER the credit card number. Sometimes only the last 4 digits of your credit card number will be printed before the CVV2 code instead of the entire credit card number.. IF YOU CANNOT READ YOUR CVV2 NUMBER, YOU WILL HAVE TO CONTACT THE ISSUING BANK.

American Express:
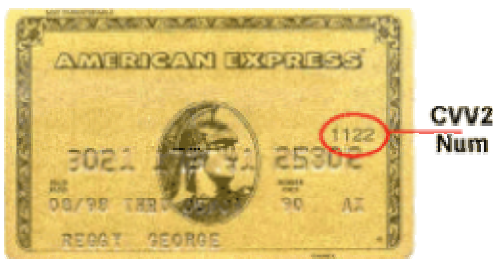
American Express cards show the 4-digit CVV2 number printed above and to the right of the imprinted card number on the front of the card

More Information

- All Visa cards were required to have CVV2 by January 1, 2001.
- All MasterCard cards were required to have CVC2 by January 1, 1997.
- All Discover and American Express cards should also have a CVV2 code.

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At first, the entire credit card number followed by the CVV2 code was printed on the signature panel of the cards. All the numbers got in the way of signing the card, so newer cards only print the last 4 digits of the card number followed by the CVV2 code.

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